

mo

Notice of Allowability	Application No.	Applicant(s)	
	10/622,795	CHEN ET AL.	
	Examiner	Art Unit	
	Julie-Huyen L. Ngo	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to _____.
2. ☒ The allowed claim(s) is/are 1-12.
3. ☒ The drawings filed on 18 July 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Allowable Subject Matter

Claims 1-12 are allowed.

Reasons for Allowance

Claims 1 and 7 are allowed since there is no prior art of record that teaches a transfective liquid crystal display device having various gaps comprising:

- a color filter layer formed on the reflective electrode and the transparent electrode, wherein a first thickness of the color filter layer in the reflective region is smaller than a second thickness the color filter layer in the transmissive region;
- a transparent organic element bridging a gap in the liquid crystal layer between the first substrate and the second substrate, formed on the common electrode in the reflective region, wherein one end of the transparent organic element shores up the color filter layer, thus a third thickness of the gap in the reflective region is smaller than a fourth thickness of the gap in the transmissive region.

Claims 2-6 and 8-12 are allowed since they depend on the allowed claims 1 and 7, respectively.

Conclusion

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Kim et al. (US 20020054256 A1) disclose a transfective liquid crystal display device includes: an upper substrate and a lower substrate opposing each other; a lower transparent electrode formed on the lower substrate; a passivation layer formed on the lower transparent electrode; a reflective electrode formed on the passivation layer, the reflective electrode having an open hole formed passing through the passivation layer such that a portion of the lower transparent electrode is exposed; a liquid crystal layer interposed between the upper and lower substrates, the liquid crystal layer having a first cell gap that corresponds to the lower transparent electrode and a second cell gap that corresponds to the reflective electrode, wherein the first cell gap is larger than the second cell gap; a color filter layer formed on the upper substrate, the color filter layer including a first portion that corresponds to the reflective electrode, a second portion that corresponds to the open hole, and a dummy pattern, wherein the second portion is thicker than the first portion, and the dummy pattern is formed in the second portion; and an upper transparent electrode formed on the color filter layer.

Iwai et al. (US 6661484 B1) disclose a reflective color LCD comprising color filters with different thicknesses.

Fujimori et al. (US 20010008437 A1) disclose a includes the second substrate includes a transparent electrode in the reflection region and the transmission region on its surface facing the liquid crystal layer and includes a light diffusion layer in the

Art Unit: 2871

reflection region, and the surface facing the liquid crystal layer is flat in the transmission region and the reflection region.

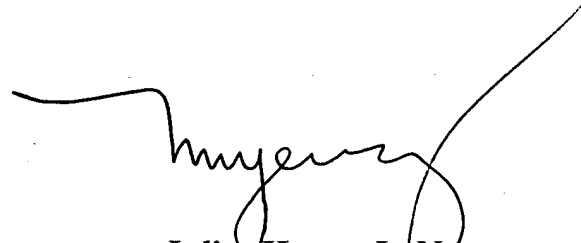
Contact Information

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Julie-Huyen L. Ngo whose telephone number is (571) 272-2295. The Examiner can normally be reached on T-Friday.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Mr. Robert H. Kim can be reached at (571) 272-2293.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1562.

November 26, 2004



Julie-Huyen L. Ngo
Primary Examiner
Art Unit 2871